

**PATENT ABSTRACTS OF JAPAN**

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21)Application number : 07-022243 (71)Applicant : SONY CORP  
22)Date of filing : 17.01.1995 (72)Inventor : NAKANO SEIJI  
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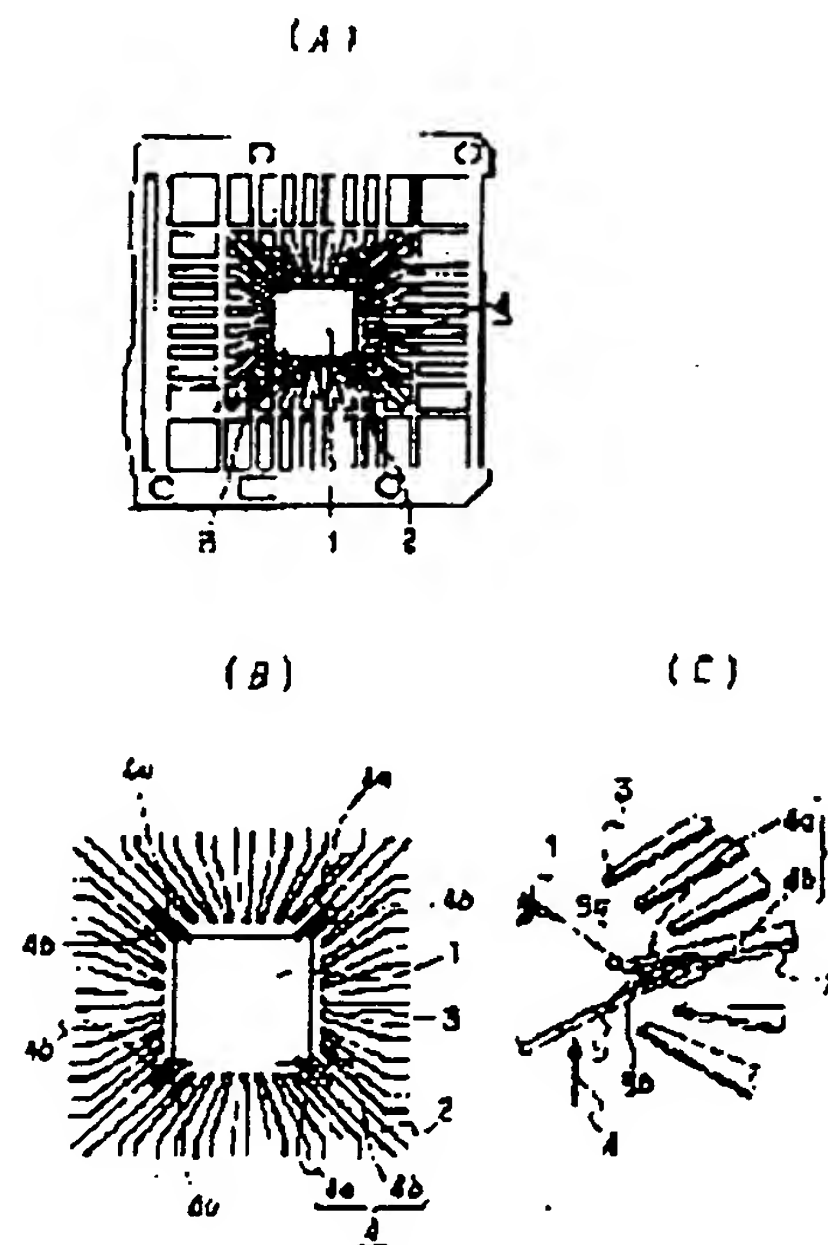
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54) LEAD FRAME

57)Abstract:

PURPOSE: To prevent deformation or open circuit of a wire, package crack, and the like due to variation in the position or direction, especially floating, of a die pad or a semiconductor element supported hereon caused by the pressure of resin at the time of resin sealing by enhancing the mechanical strength at the depress part of a support lead.

CONSTITUTION: In a lead frame where the root part of a lead 2 supporting a die pad 1 which supports a semiconductor element is depressed, the depressed part 4 of the support lead 2 is split into a plurality of subsections 4a, 4b. One subsection 4a is set longer than the other subsection 4b wherein the subsections 4a, 4b and the support lead 2 of the die pad 1 substantially define a triangle, when the depressed part is viewed from the side, thus providing a reinforcing part.



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# SEMICONDUCTOR DEVICE AND PRODUCTION THEREOF

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 Publication date: 1996-03-08  
 Inventor(s): YAMADA TOMIO;; MURAKAMI HAJIME  
 Applicant(s): HITACHI LTD  
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 EC Classification:  
 Equivalents: JP3027512B2

## Abstract

PURPOSE: To enhance the performance of a product by connecting each inner lead directly with a pellet at each connecting part thereby decreasing the external resistance significantly as compared with an electrical connection through bonding wire and separating a header from an inner lead group so that a best material can be employed for the inner lead and the header.  
 CONSTITUTION: A power transistor comprises a planar pellet 10 on which an MOSFET circuit is fabricated, three inner leads 35, 36, 37, a header 41 for enhancing the heat dissipation performance, and a resin seal 44 sealing the pellet 10, the inner lead group and a part of the header. Each inner lead is connected electrically and mechanically with a connecting part 25, 26, i.e., a bump, on the circuit side major surface of the pellet 10 and the header 41 is jointed to the opposite major surface of the pellet.

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